AMENDMENTS TO THE SPECIFICATION:

Please replace paragraph [0020] with the following amended paragraph:

[0020] In some cases, it may be advantageous to transmit light through a relatively small dimension of chamber 82 such that system 80 is allowed to accurately track, count, characterize and identify microparticles within the fluid passing there through. In particular, transmitting light through a relatively narrow dimension of chamber 82 may allow relatively small amounts of the fluid and suspended particles to be analyzed. As a result, a relatively small number of microparticles may exist at a particular section of chamber 82 at a given point in time. More specifically, the density of microparticles in chamber 82 may be such that a substantial number of microparticles are not traversing in the shadow of other microparticles hindering the tracking, counting, characterization and identification of individual microparticles. It is noted that the dimensions of chamber 82 do ~~does~~ not necessarily restrict microparticles from traversing in the shadow of each other entirely, but merely serves to minimize the overlap of the number of microparticles in the fluid. As noted above, width W (i.e., the distance between the opposing view ports within the back and front sidewalls of chamber 82) may, in some embodiments, be configured to be the smallest dimension of chamber 82. In particular, chamber 82 may have a width between approximately 10 microns and approximately 200 microns or, more specifically, between approximately 50 microns and approximately 100 microns. In yet other embodiments, height H may be configured to be the smallest dimension of chamber

Please replace paragraph [0025] with the following amended paragraph:

[0025] An exemplary illustration of wavelength-specific light absorption data depicting microparticles measured in sequential images captured by an imaging system is illustrated in Fig. 5. In particular, Fig. 5 illustrates the intensity of light transmitted through a region of a chamber in which microparticles exist. A narrow range of light transmissions at specific wavelengths may be used to characterize the content of microparticles and, therefore, may be used to identify specific microparticles (i.e.,

distinguish microcapsules from debris particles and bubbles). As shown in Fig. 5, relatively low transmissions (i.e., high absorptions) of light may be indicative of debris microparticles or bubbles, while relatively high transmissions (i.e., low absorptions) of light may be indicative of microcapsules. In some cases, debris microparticles and/or bubbles may additionally or alternatively exhibit higher transmissions of light than the microcapsules. In any case, the reflection and/or transmission of light from microcapsules may be distinguishable from the ~~reflective~~ reflection and/or transmission of light from debris microparticles and/or bubbles and, therefore, may offer a characteristic with which to track, count, characterize and/or identify microparticles within a fluid as discussed in more detail below. In some embodiments, the reflection of light from the microparticles may be plotted versus time and/or distance within the chamber to further enhance the ability to track, count, characterize and/or identify microparticles within a fluid.